

**DECISION DOCUMENT**  
**Alaska Department of Environmental Conservation**  
**Division of Water**  
**Wastewater Discharge Authorization Program**  
**May 5, 2017**

**LTF General Permit**  
**Keete Inlet LTF & LSA**  
**Keete Inlet**  
**Sealaska Timber Company, LLC**  
**Authorization No. AKG701068**

Sealaska Timber Company, LLC (STC) submitted a Notice of Intent (NOI) requesting authorization to discharge bark and wood debris at the Keete Inlet LTF & LSA (LTF) under the Alaska Pollutant Discharge Elimination System (APDES) General Permit for Log Transfer Facilities, AKG701000 (general permit). The location is Keete Inlet, Prince of Wales Island at a latitude of 55° 2' 53" N and longitude of 132° 32' 56" W.

This Decision Document presents an assessment of regulatory issues with respect to the requested authorization.

**Background**

STC seeks authorization for log rafting and storage at Keete Inlet as described in the NOI. Log bundles will be placed in the water by a rubber-tired front end loader driving down a low-gradient ramp. Bundles of logs will be built into log rafts by a boom boat and will be towed to log storage areas until a tug boat arrives to transfer the logs to the Hydaburg Ship Moorage Facility, which is covered under a separate authorization (AKG701031.)

The project area for log rafting and storage in Keete Inlet is 40 acres in accordance with Alaska Division of Lands (ADL) # 108535 Tracts A and D. Haggitt Consulting conducted pre-discharge dive surveys of the LTF in January of 2017. No bark, woody debris, or critical habitat was observed. Species important to subsistence, recreational, or commercial harvest (e.g., king crab) were in low abundance. The closest catalogued, anadromous stream is located approximately 0.3 miles from the LTF. The *Prince of Wales Island Area Plan Amendment* (Alaska Department of Natural Resources, May 2008) states that the management intent for Southeast Keete Inlet is to “manage this unit consistent with the requirements for Log Transfer Facilities and Sort Yards.”

**Antidegradation Policy**

The Antidegradation Policy of the Alaska Water Quality Standards (WQS) (18 AAC 70.015) states that existing water uses and the level of water quality necessary to protect existing uses must be maintained and protected. For Tier 2 water bodies, which the Department has conservatively assumed the water body (i.e., Keete Inlet) to be, the Department may allow reduction of water quality only after finding that five specific criteria are met. These criteria and the Department's findings are set out below.

**1. 18 AAC 70.015 (a)(2)(A). Allowing lower water quality is necessary to accommodate important economic or social development in the area where the water is located.**

The Department finds that localized lowering of water quality is necessary as other alternatives to support the activity were found to be infeasible. The use of barging to avoid the in-water transfer and storage of logs would more than double the cost of handling logs. Due to the commodity value of timber in Alaska, transportation costs have to be kept competitive to compete with producers from around the world and to realize social and economic benefits.

The Keete Inlet LTF will allow for resource development on Sealaska lands. Sealaska is an Alaska Native Regional Corporation with a mission to provide returns to over 16,000 shareholders. The harvest

of a minimum of 150 million board feet of timber at the Keete Inlet operation is important to Sealaska's mission.

STC's harvest of timber on Sealaska lands will create social and economic benefits for local communities and the State of Alaska. Over the course of 8-10 years, STC projects that 120-180 jobs will be created in road construction, logging, and transportation services. Additional benefits will accrue to local communities and the State through the flow of cash to local vendors who provide food, housing, fuel, transportation, and other support services.

DEC finds that authorization to discharge at the Keete Inlet LTF accommodates important economic activity and that this requirement is met.

**2. 18 AAC 70.015 (a)(2)(B). Except as allowed under this subsection, reducing water quality will not violate the applicable criteria of 18 AAC 70.020 or 18 AAC 70.235 or the whole effluent toxicity limit in 18 AAC 70.030.**

Except within the ZOD, violation of the water quality criteria in 18 AAC 70.020 is prohibited. Reduction of water quality in the ZOD is specifically authorized according to 18 AAC 70.210 and as allowed in 18 AAC 70.015(a)(2). Justification for DEC's decision to authorize a ZOD is provided at the end of this Decision Document. All applicable water quality criteria will be met outside the boundary of the ZOD.

The general permit requires the permittee to establish best management practices and pollution prevention plans to minimize the deposition of bark and woody debris within the ZOD. Annual dive surveys are required to document conditions at the site. A remediation trigger of one acre of continuous bark coverage, 10 centimeters in thickness, is established in the general permit for the ZOD. If an annual dive survey demonstrates that this remediation trigger has been exceeded within the ZOD, the operator is required to submit a Remediation Plan to DEC within 120 days of discovery of such conditions. The Remediation Plan must identify a set of feasible, reasonable, and effective measures that the operator proposes to implement to reduce existing and future continuous coverage by bark and wood debris to less than the one acre remediation trigger.

Discharges authorized under the general permit will not violate applicable water quality criteria, including those criteria established under 18 AAC 70.235. Under this regulation, the Department may establish a site-specific water quality criteria that modifies a water quality criterion set for a waterbody. Since there are no site-specific criteria established for Keete Inlet, further evaluation is not required.

Discharges authorized under the general permit will not violate the whole effluent toxicity limit in 18 AAC 70.030. The general permit authorizes the discharge of bark and wood debris only within the ZOD. These residues are non-toxic, and the discharge of bark and wood debris from logs will not impart chronic toxicity to aquatic organisms.

The Department finds that the reduced water quality will not violate applicable water quality criteria and that the requirement is met.

**3. 18 AAC 70.015 (a)(2)(C). The resulting water quality will be adequate to fully protect existing uses of the water.**

DEC has concluded that ecologically significant effects from the discharge and accumulation of bark and wood debris at Keete Inlet will not occur outside the project area ZOD given the permit requires compliance with WQS. As such, WQS, including existing uses, should be maintained and protected in

Keete Inlet as a whole subject to compliance with permit terms. DEC concludes that water quality will be adequate to fully protect existing uses of the water. DEC finds this requirement is met.

**4. 18 AAC 70.015 (a)(2)(D). The methods of pollution prevention, control, and treatment found by the department be most effective and reasonable will be applied to all wastes and other substances to be discharged.**

The methods of prevention, control, and treatment DEC finds to be most effective are the practices and requirements set out in the general permit. The proposed LTF site was specifically located so as to ensure compliance with Alaska Timber Task Force Guidelines. As discussed in finding 18 AAC 70.015 (a)(2)(A) above, alternate methods of pollution prevention, control, and treatment (e.g. barging) were not found to be the most effective and reasonable. The general permit requires the operator to follow prescribed best management practices and to develop and implement a Pollution Prevention Plan to control waste discharge. The general permit also requires the operator to prepare a proposed remediation plan if continuous cover by bark and wood debris exceeds a threshold of one acre.

DEC concludes that compliance with the general permit conditions will ensure that the most effective and reasonable methods of pollution prevention, control and treatment will be applied. DEC finds that this criterion is met.

**5. 18 AAC 70.015 (a)(2)(E). All wastes and other substances discharged will be treated and controlled to achieve (i) for new and existing point sources, the highest statutory and regulatory requirements; and (ii) for non-point sources, all cost-effective and reasonable best management practices.**

The applicable “highest statutory and regulatory treatment requirements” are defined in 18 AAC 70.990(30) (as amended June 26, 2003) and in DEC’s *Policy and Procedure Guidance for Interim Antidegradation Implementation Methods*. Accordingly, there are three parts to the definition, which are:

- (A) any federal technology-based effluent limitation guidelines (ELG) identified in 40 CFR § 125.3 and 40 CFR § 122.29, as amended through August 15, 1997, adopted by reference at 18 AAC 83.010(c)(9);
- (B) minimum treatment standards in 18 AAC 72.040; and
- (C) any treatment requirement imposed under another state law that is more stringent than a requirement of this chapter.

The first part of the definition includes all federal technology-based ELGs. No federal technology-based ELGs for this industrial sector have been promulgated.

The second part of the definition 18 AAC 70.990(B) (2003) appears to be in error, as 18 AAC 72.040 describes discharges to sewers and not minimum treatment. The correct reference appears to be the minimum treatment standards found at 18 AAC 72.050, which refers to domestic wastewater discharges only. No domestic wastewater discharges are authorized under the general permit, so this part of the definition is not applicable.

The third part includes any more stringent treatment required by state law, including 18 AAC 70 and 18 AAC 72. Neither the regulations in 18 AAC 15 and 18 AAC 72 nor another state law that the Department is aware of impose more stringent requirements than those found in 18 AAC 70.

After review of the applicable statutory and regulatory requirements, including 18 AAC 70, 18 AAC 72, and 18 AAC 83, the Department finds that the authorized discharge meets the highest applicable statutory and regulatory requirements and that this finding is met.

### **ZOD**

Under the ZOD provision of the Alaska WQS (18 AAC 70.210), the Department may authorize deposit of substances on the bottom of marine waters within limits set by the Department. The water quality criteria may be exceeded in a ZOD but must be met at every point outside the authorized ZOD.

In the general permit, the Department allows a ZOD for the accumulation of bark and wood debris on the ocean bottom within the project area of an LTF or log storage area (LSA). The ZOD may include "continuous coverage," "discontinuous coverage," and "trace coverage" by bark and wood debris. The area limit is the project area of the LTF or LSA.

However, the general permit requires that if a bark monitoring survey shows that continuous coverage by any existing bark and wood debris, whenever deposited, exceeds both 1.0 acre and a thickness of 10 centimeters at any point, the operator must submit a proposed Remediation Plan to the Department to reduce existing and future continuous coverage to less than both 1.0 acre and a thickness of 10 centimeters at any point. The plan is subject to Department approval, modification, or denial. In this manner, the Department establishes a one acre continuous bark "threshold", which, if exceeded, requires remedial action.

During the review of a NOI, the Department evaluates the proposed ZOD to determine if it complies with the terms of the permit. The basis for this determination is consideration of certain terms of the general permit and the six factors listed below.

### **ZOD Assessment**

The Department reviewed the NOI, including bark monitoring surveys from 2017. The Department concludes that the authorized ZOD is acceptable at the location of the Keete Inlet LTF.

In authorizing a ZOD, the Department must consider: (1) alternatives that would eliminate or reduce adverse effects of the deposit; (2) potential direct and indirect impacts on human health; (3) potential impacts on aquatic life and other wildlife; (4) potential impacts on other uses of the water body; (5) expected duration of the deposit and any adverse effects; and (6) potential transport of pollutants by biological, physical, and chemical processes. The Department's six ZOD regulatory findings are provided below.

- 1) The ZOD provision requires the Department to consider alternatives that would eliminate or reduce adverse effects of the deposit. Further, the general permit requires the NOI to include an assessment of the feasibility of onshore log storage and barging. The following is the Department's assessment of alternative considerations:
  - a) Authorization of a ZOD for the Keete Inlet LTF is necessary to support log transfer and storage. The LTF is needed to get timber from privately owned, Sealaska lands to market. The high cost of barging could render this project economically infeasible, which would eliminate the economic and social benefits of the project for Sealaska stakeholders, local communities, and the State of Alaska.
  - b) STC's application identified and evaluated three alternatives to eliminate or reduce adverse effects of the deposit which included construction of: a barge bulkhead, an upland marine site

and a piled (pier) structure. The alternatives were rejected due to operational issues and increased cost that would make this project unworkable and/or economically unfeasible.

- 2) Biological and human uses of the area are described above in the Antidegradation Analysis, 18 AAC 70.015 (a)(2)(C). The Department concludes on the projections required by the general permit as well as based on case histories from similar sites that uses will be fully protected outside the ZOD and that impacts on human health are not at issue.
- 3) and 4) Pre-discharge dive surveys performed by Haggitt Consulting during January of 2017 failed to document critical habitat at the proposed LTF site.  
  
Given that the authorized activity is consistent with WQS per the terms of the general permit and this authorization, DEC concludes that other existing uses for the water should be fully protected.
- 5) DEC recognizes that most published scientific literature projects that the duration of a bark deposit may be several years in length. However, 2007 DEC-funded studies conducted at legacy Clean Water Act §303(d) LTF sites in Southeast Alaska (Hobart Bay, Twelvemile Arm, Schulze Cove, and Thorne Bay) found that the bark piles at these sites had either dispersed and were no longer visible or had been incorporated into native sediments.
- 6) Bark that does not accumulate within the project area will be transported elsewhere and dispersed by natural processes. No bark was observed within the project area during the pre-discharge surveys. Bark, given its innocuous nature, if transported from the project area, is not expected to impair existing uses within Keete Inlet.

*Conclusion* The Department concludes that in-water log storage, bark discharge, and bark accumulation at the Keete Inlet LTF are consistent with the ZOD provisions.